
10/611,574

ERICP0343US

Amendments to the Specification

Please amend paragraph [0056] as follows:

[0056] It will be appreciated that the variable impedance unit 48 shown in Fig. 4 3 is only one example of a wide variety of possible configurations of variable resistance or impedance devices. Many variations to a variable resistance unit will be realized by one skilled in the art. For example, there may be a greater or lesser number of parallel combinations of resistors and transorbs or Zener diodes. For instance, ten or more parallel combinations of resistors and Zener diodes are possible. As another example, it will be appreciated that the values of the resistors and the breakdown voltages of the transorbs or Zener diodes may be selected so as to achieve any of a variety of voltage-resistance characteristics. As one example, the variable resistance unit 48 may be configured so as to achieve two different resistances. Alternatively the breakdown voltages of the transorbs and the values of the resistances put into parallel with them, may be selected so as to provide three or more resistance levels for the variable resistance unit 48. Thus the resistance may decrease in a stepwise manner as the voltage difference increases. In addition, it will be appreciated that many other configurations of different types of electrical components may be made so as to achieve a resistance that is variable and a function of voltage.

Please amend paragraph [0057] as follows:

[0057] It will be appreciated that the variable resistance unit 48 may be configured to synergistically interact with the configuration of the various tips 24-28 of the tip set 30, so as to achieve desired spark generation characteristics of the air terminal 10 for each of the tips 24-28 of the tip set 30 that may be installed therein. For example, when the tip 24, with the lowest radius of curvature and the largest spark gap, is installed in the air terminal 10, it may be desirable to have a lower resistance than when the tip 28, with

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the largest radius of curvature and the smallest spark gap, is installed. Since the larger spark gap associated with the tip 24 requires a larger voltage difference between the conductive shell 14 and the grounded central rod 12 to produce sparking across the gap, the variable impedance unit 48 shown in Fig. 43 may be used to change the resistance relative to that encountered when the other tips 26 and 28 are used.